PROFILE PUBLICATIONS

The Chance Vought F4U-4 to F4U-7 Corsair

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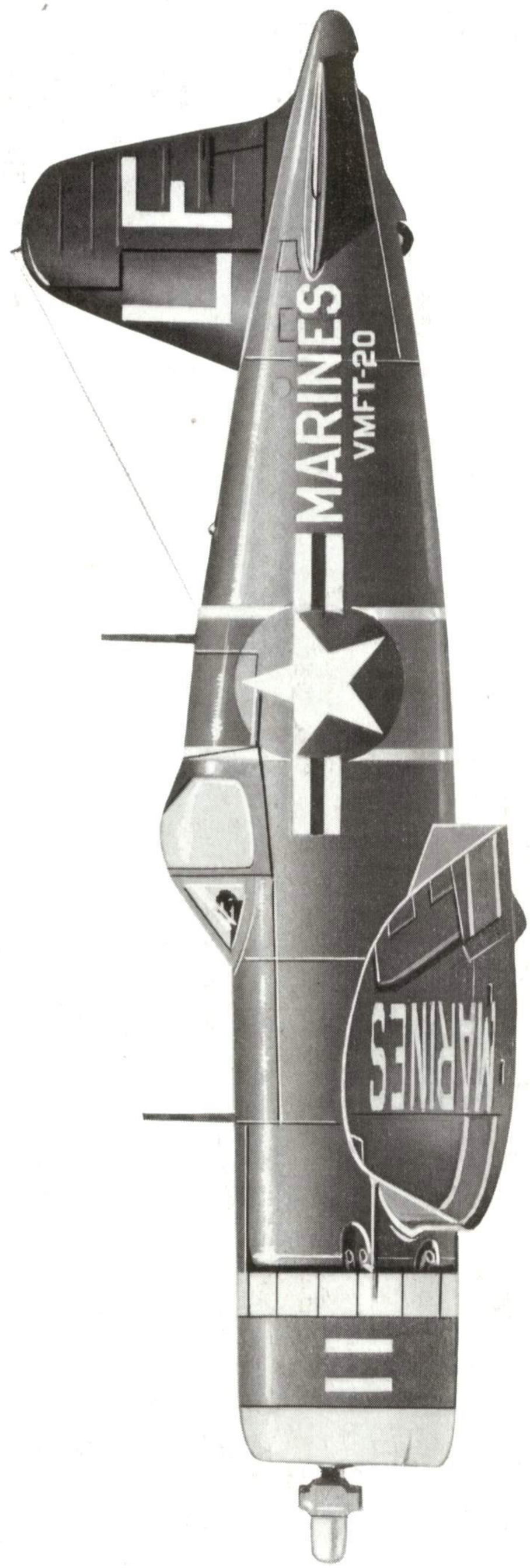

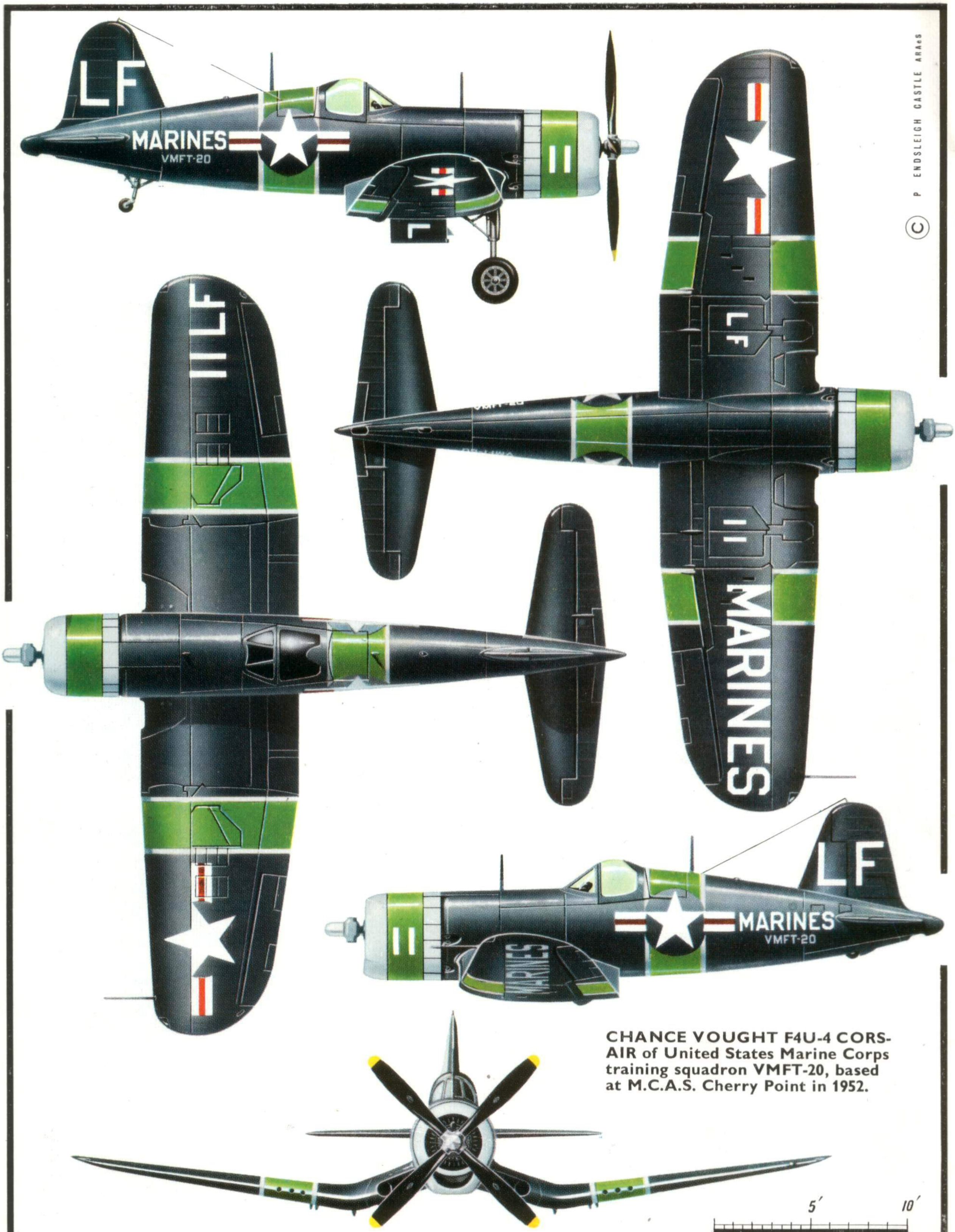

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CHANCE VOUGHT F4U-4 CORSAIR of United States Marine Corps training squadron VMFT-20, based at M.C.A.S. Cherry Point in 1952.

5′ 10′

The Chance Vought F4U-4 to F4U-7 Corsair

by Jay Frank Dial

Comparison with the title page of Mr. Dial's Profile *on the F4U-1 and -2 variants* (Profile No. 47) *will emphasise the immediate differences between the F4U-1 and the F4U-4 illustrated above, namely the "chin" carburettor intake and four-blade airscrew.* (*Unless specifically indicated otherwise, all photographs appearing in this* Profile *are provided by courtesy of the manufacturers*).

When the Korean "Land of Morning Calm" was shattered as the People's Army of North Korea swarmed across the 38th Parallel, the U.S. Marines and their Corsairs weren't long in coming. On the 25th day of June 1950 there were no Marine units of any size in the Far East. By 2nd July, General MacArthur had requested the immediate dispatch of a Marine Regimental Combat Team together with supporting air components. Embarked within six days of formation of the First Provisional Brigade, the Fifth Marines and Marine Air Group MAG-33 became the first new United States-supplied unit to reach Korea on 2nd August 1950.

It seems ironic that when the Korean War began, of two of the best close support/ground attack aircraft of World War II, the Corsair and P-47 Thunderbolt, only the Corsair was available. The Corsair, the Navy's "failure", was still in service and the old faithful "Jug" had been relegated to the National Guard or the junk heap. Thus much of the Air Force's initial close support chores fell to the far more vulnerable F-51 Mustang.

Before the ground troops went into combat, eight F4U-4B's of VMF-214 had been launched off the *U.S.S. Sicily* and made rocket and bomb strikes against Chinju and the village of Simban-ni, on 3rd August. Marine Air Group 33 was composed of VMF-214, commanded by Lt.-Col. Walter E. Lischeid (later killed in action) and initially based on board the *U.S.S. Sicily* (CVE-118) and VMF-323 with Maj. Arnold A. Lund in command, and began operations from the *U.S.S. Badoeng Strait* (CVE-116). Both flew cannon-armed F4U-4B's.

Flying F4U-5N's on night intruder and "heckler" missions from Itazuke, Japan, VMF(N)-513 was commanded by Maj. Joseph H. Reinburg. Observation chores were handled by VMO-6 with Sikorsky HO3S helicopters and Convair OY-2 fixed-wing light planes; the C.O. was Maj. Vincent J. Gottschalk.

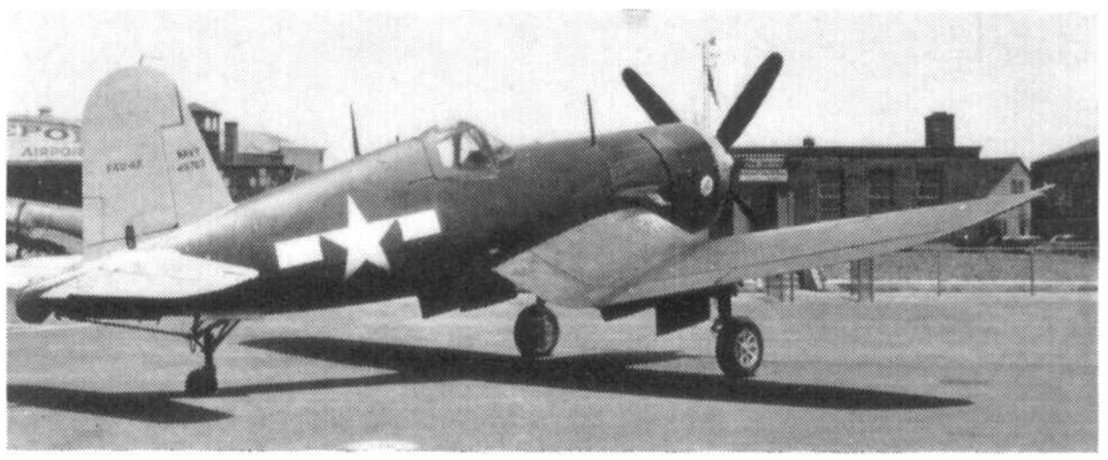
Taking the Corsair back into combat must have given a few Marines that "this is where I came in" feeling. Two stories indicate this: one Marine when asked for his opinion of the Corsair is quoted as having said, "It was good enough for my old man, so it's good enough for me." Another is said to have wound up flying the same Corsair that he had flown during World War II; that would tend to give one a rather spooky feeling ! One veteran Corsair flew 107 missions in World War II and when "reincarnated" flew number 150 as aircraft "24" of VMF-212.

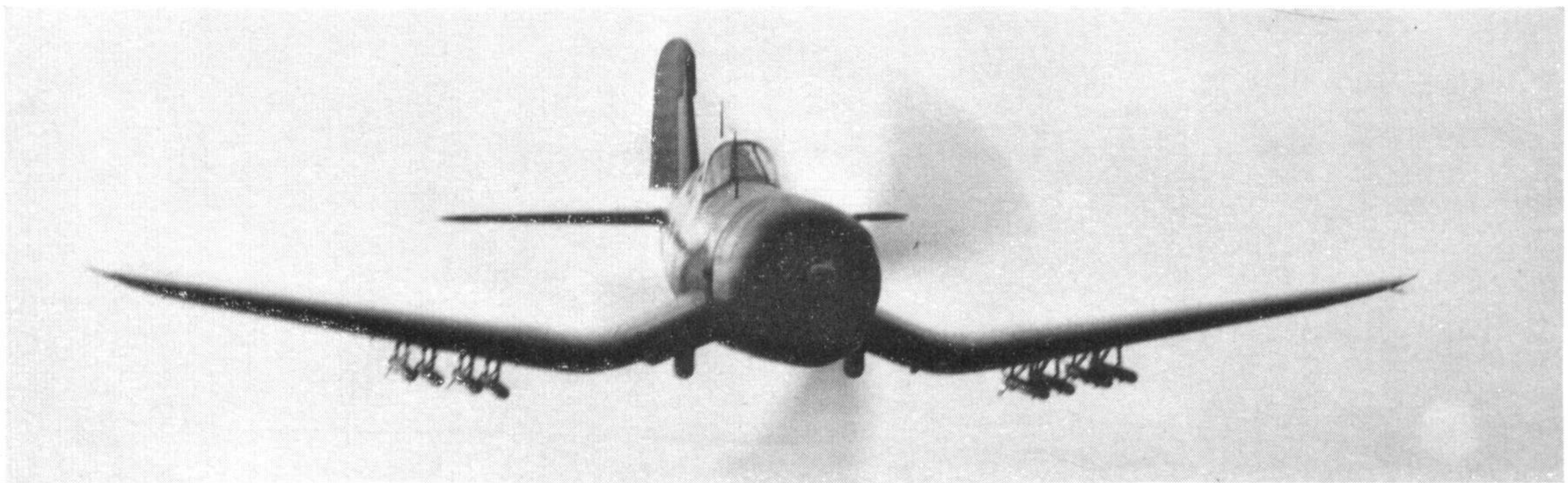
In the first 10 months of the Korean War, F4U's accounted for 82% of all close support missions flown by the Navy and Marines. In 1952 VMF-323 set an all-time high-effective combat record: 1,160 effective sorties in one month. Ninety-one sorties, dropping more than 120 tons of ordnance, were flown in one day with 100 per cent. availability for the Corsairs recorded.

Navy Commander John (Tex) O'Neill of VF-113, wrote his mother in Dallas, Texas to get the Chance Vought Test Pilot on the phone and tell him, "My plane has 3 tails, 66 patches and two engines in it, but I'll get it back to the Vought plant if I have to swim and tow it !"

And from one extreme to the other, Marine Capt. Jessie G. Folmar shot down a MiG while flying a Corsair, and another pilot used his arrester hook for ripping out telephone and telegraph lines.

The F4U-4XA, originally F4U-1 BuNo 49763. First flight of the prototype took place on 20th September 1944.





F4U-4 with flat bullet-proof windshield panel; note also the width of the sliding canopy.

THE CORSAIR'S STRUCTURE

All subsequent versions of the Corsair retained the basic structure of the F4U-1 with the relatively minor modifications discussed in each specific section. (Full details of the F4U-1 and -2 can be found in *Profile* No. 47.)

The fuselage was divided into four main assemblies; the engine section and forward, mid and aft fuselage sections were of all-aluminium monocoque construction. The engine was ahead of the firewall at fuselage station 91¾ (inches). The forward fuselage extended from the firewall aft to the trailing edge of the cockpit, station 186. The main fuel cell, placed immediately ahead of the cockpit, was of self-sealing multi-ply rubber construction and held 237 gallons, with a standpipe reserve for take-off and landings of 50 gallons. Being attached by bolts and rivets, the inverted gull-shaped centre section of the wing, an all-aluminium boxbeam structure composed of the main beam, inter-beam and leading and trailing edges, was an integral part of the forward fuselage section.

Intakes placed in the wing root leading edges supplied air for the inter-coolers and oil coolers. In the AU-1 series, they supplied air for the oil coolers and engine-driven crankcase supercharger. Air was exited through oil cooler doors and the centrally placed dump door under the fuselage ahead of the wing spar.

The fuselage mid-section, stations 186 to 288, contained all radio, navigation and recognition equipment and was bolted to the forward section.

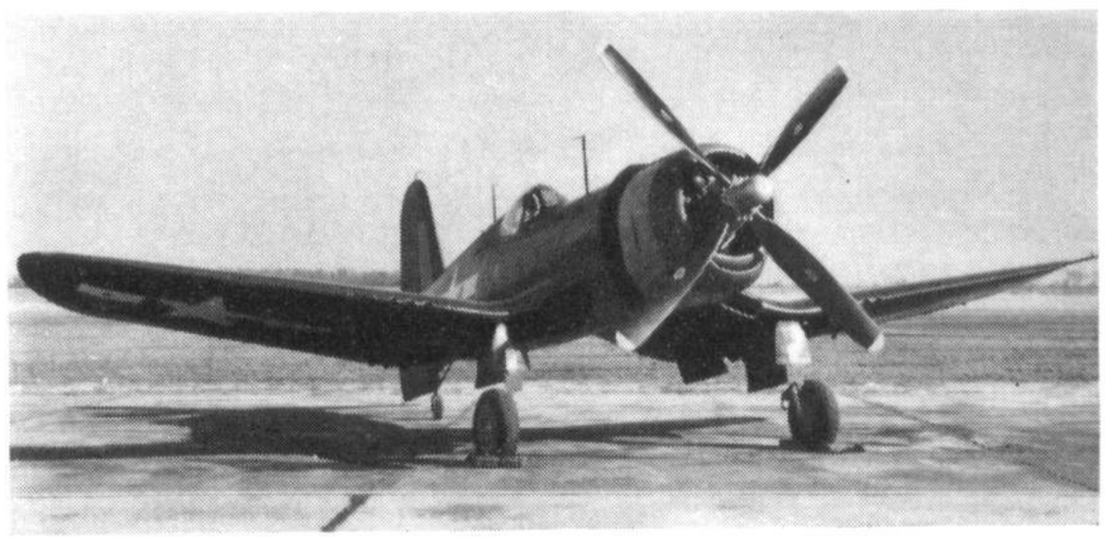
The aft section, from stations 288 to 371½, carried fin and stabilizer attach points and cutouts and fittings for tail wheel and fairing doors. The fuselage was topped off by a small tailcone end-cap containing the tail running light.

Wing structure consisted of the centre section integral with the forward fuselage section and hydraulically-folded outer panels. The F4U-4 retained the original fabric covering aft the wing spar on the all-aluminium structure outer panels. Jury struts locked the wings in the fully folded position. To permit refueling and gun servicing, the strut could be extended and the wings moved into the vertical position. Wing airfoils, N.A.C.A. 23000 section, were 18% thickness at the root, 15% at the folds and 9% at the tip.

The fin was all-aluminium and stabilizers were of "Metalite" construction on most versions. Ailerons were of plywood construction and rudder and elevators were fabric covered aluminium structures.

To permit wheels to lie flat within the wings, the retractable main landing gear legs rotated 90° in folding rearward. The tailwheel was a 360° swivelling, self centring, lockable type. With carrier hook attached, the wheel and strut folded rearward.

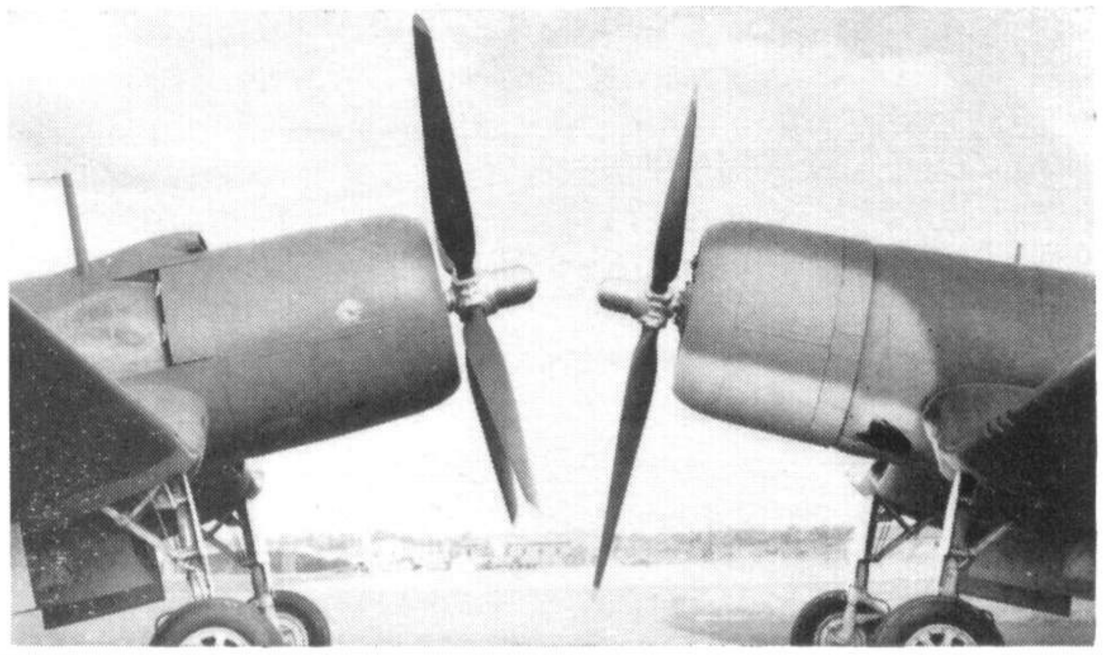
In most versions, the main landing gear legs with the attached dive brake fairings were lowered for use as dive brakes. Speed limitations were set at 350 knots and in late F4U-4's, the entire landing gear including tailwheel, was lowered as dive brakes.



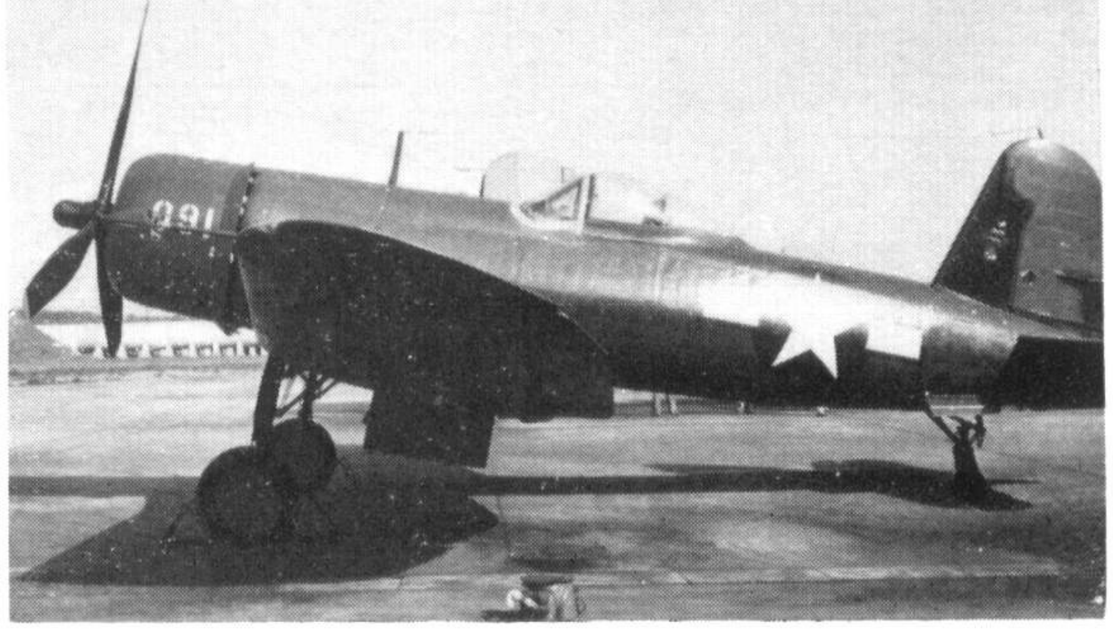
The numeral 1 on the orange-yellow cowl panel would seem to indicate that this was the first of the five XF4U-4's ordered on 12th September 1944. (Photo: U.S.N./ National Archives)

A U.S. Marine Corps F4U-4 over Okinawa in the closing stages of World War Two; note rockets and "jellied gasoline" (napalm) canisters. (Photo: U.S.M.C. via Naval Aviation News)

F4U-7 for the French Aéronavale *during a flight test in the U.S.A. The fuselage lines of the F4U-5 were retained: in common with the -5 and AU-1 there was a widening ahead of Station 91¾.*



F4U-1M Wasp Major cowling (left) compared with the cowling of a standard F4U-1. (Photo: Pratt & Whitney)



FG-1 BuNo 14091 with the bubble canopy fitted to the F2G-1; a plexiglass windshield with the lines of the production version has been mounted on the aircraft. (Photo: Goodyear)

THE CORSAIR VARIANTS

F4U-4

On 20th May 1943, Vought began the initial engineering on the F4U-4. Two F4U-1 aircraft, BuNo's 49763 and 50301, were converted to the F4U-4XA and -4XB respectively. First flight was 20th September 1944. Along with 1,414 production aircraft, five additional XF4U-4's were ordered on 12th September 1944.

Using a strengthened Twin Wasp engine of the R-2800-18W "C" series (and the -42W engine in later aircraft) the F4U-4 was a limited modification of the F4U-1. Cowling changes were necessitated to supply the increased intake and cooling air required by the more powerful engine. The carburettor intake was designed as a chin under the formerly round cowling. This additional depth was carried aft to the line of the wing spar where a dump was formed to exit cooling air; to absorb the additional horsepower, a four blade Hamilton-Standard propeller was fitted.

While the first 1,000 aircraft retained the round windscreen of the F4U-1 Corsair, there were cockpit modifications to get rid of the "deep pit" cockpit and bring it up to more modern console standard. Retaining the all-metal fabric covered wing outer panels of the previous design, there was the addition of removable wing tips attached at wing panel station 149. These tips were one-piece moulded plastic, or aluminium alloy on later aircraft. Many aircraft had stabilizers of "Metalite" construction. "Metalite" is a Vought-developed sandwich material consisting of end-grain slices of mahogany, pine or balsawood bonded between two sheets of aluminium. The stabilizers used a "Metalite" skin bonded to internal stiffeners.

An additional 2,533 production aircraft were ordered on 21st September 1944. Together with 2,900 ordered later, 793 were cancelled on V.J. Day. Goodyear had placed their FG-4 version in production only to have all 2,500 cancelled.

When these V.J. Day cancellations came, the Goodyear production line at Akron, Ohio was full and about 12 aircraft were ready for flight testing. None were actually flown, however. If any aircraft had been delivered, Goodyear would have been required to deliver all supporting spares, manuals, etc., for the entire contract. As the Navy had decided to scrap all assembled aircraft, they were cut in half, dumped in railroad cars and sold as scrap. Such is the economics of military aircraft production, where contract provisions make it cheaper to junk something than to deliver it.

F2G-1 BuNo 88454; note the wing root inlets, smaller than those of a standard Corsair. Without a supercharger, no intercoolers were required, and only the oil coolers were fed from the wing roots. (Photo: Goodyear)

Beginning with the 1,001st F4U-4, BuNo 81759, a block of 20 aircraft mounted a redesigned windscreen with a flat bulletproof centre panel and formed plexiglass side panels. Permitting a wider canopy and allowing better rearward vision, this modification was fitted to all aircraft beginning with BuNo 81829.

Standard armament on early F4U-4's was six ·50 calibre wing guns with 400 rounds per gun, inboard and centre guns, and 375 rounds for each outboard gun. According to F4U-4 Maintenance Manuals, the last 140 aircraft were delivered as F4U-4B's, with four 20 mm. cannon with 220 rounds per gun for a normal load of 880 rounds. There was a maximum overload capacity of 984 rounds with feed chutes and gun feeders full. Other sources give F4U-4B production at 287 aircraft.

Both machine gun and cannon armed versions could carry eight 5 inch rockets on wing outerpanel mounts and 1,000 lb. bombs or 11·75 inch "Tiny Tim" rockets on the twin centre section pylons. Forty-eight F4U-4 aircraft mounted the AN/ASG-10 Bomb Director, Mk. 1, Mod. 1 "toss bombing" equipment.

While in level flight prior to a dive attack, the AN/ASG-10 power was switched on and the gyros caged and uncaged. After entering the dive with the proper sighting allowances set on the gun sight, the bomb release was pressed. At the proper point in the dive, the indicator light would come on for the pull-out to be begun. During pull-out the bomb was automatically released to hit the target.

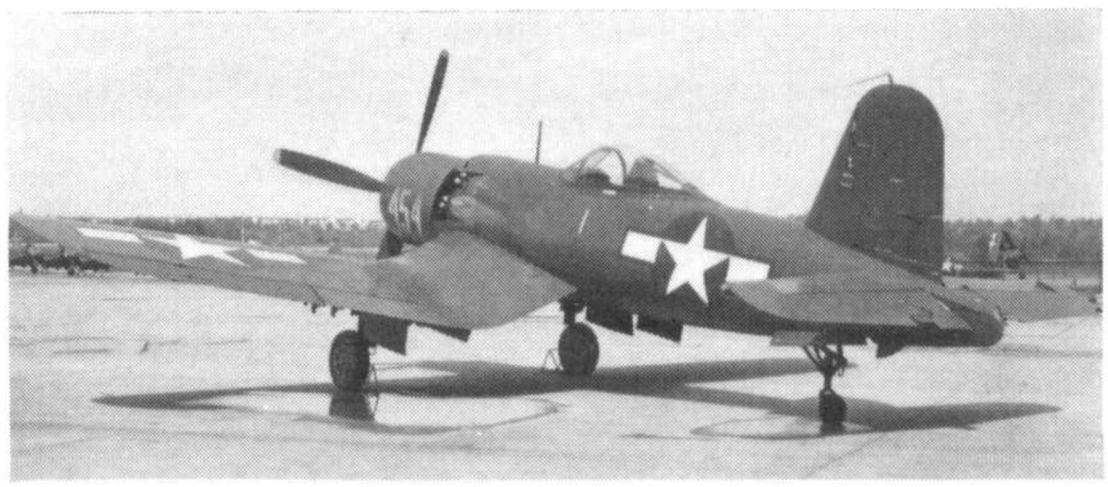
Salvo firing of wing mounted rockets was prohibited due to the danger of structural damage. Firing was done by pairs (one right and one left) or singles, one right, one left, one right, etc. For ease of computations concerning speed, range and fuel consumption with external stores, the term "One External Unit" was used. An External Unit consisted of one auxiliary drop tank (150 gal.), a 1,000 lb. bomb, eight 5 inch rockets or one 11·75 inch rocket.

The last of 2,356 F4U-4 Corsairs was delivered on 1st August 1947. Included in this number were a presently unknown quantity of F4U-4E with AN/-APS-4 radar and F4U-4N with AN/APS-6 radar as nightfighters. Eleven F4U-4's were delivered as F4U-4P for photo reconnaissance.

F2G-1

While it is really outside the scope of this *Profile*, some mention must be made of the most powerful Corsair ever built, the Goodyear F2G.

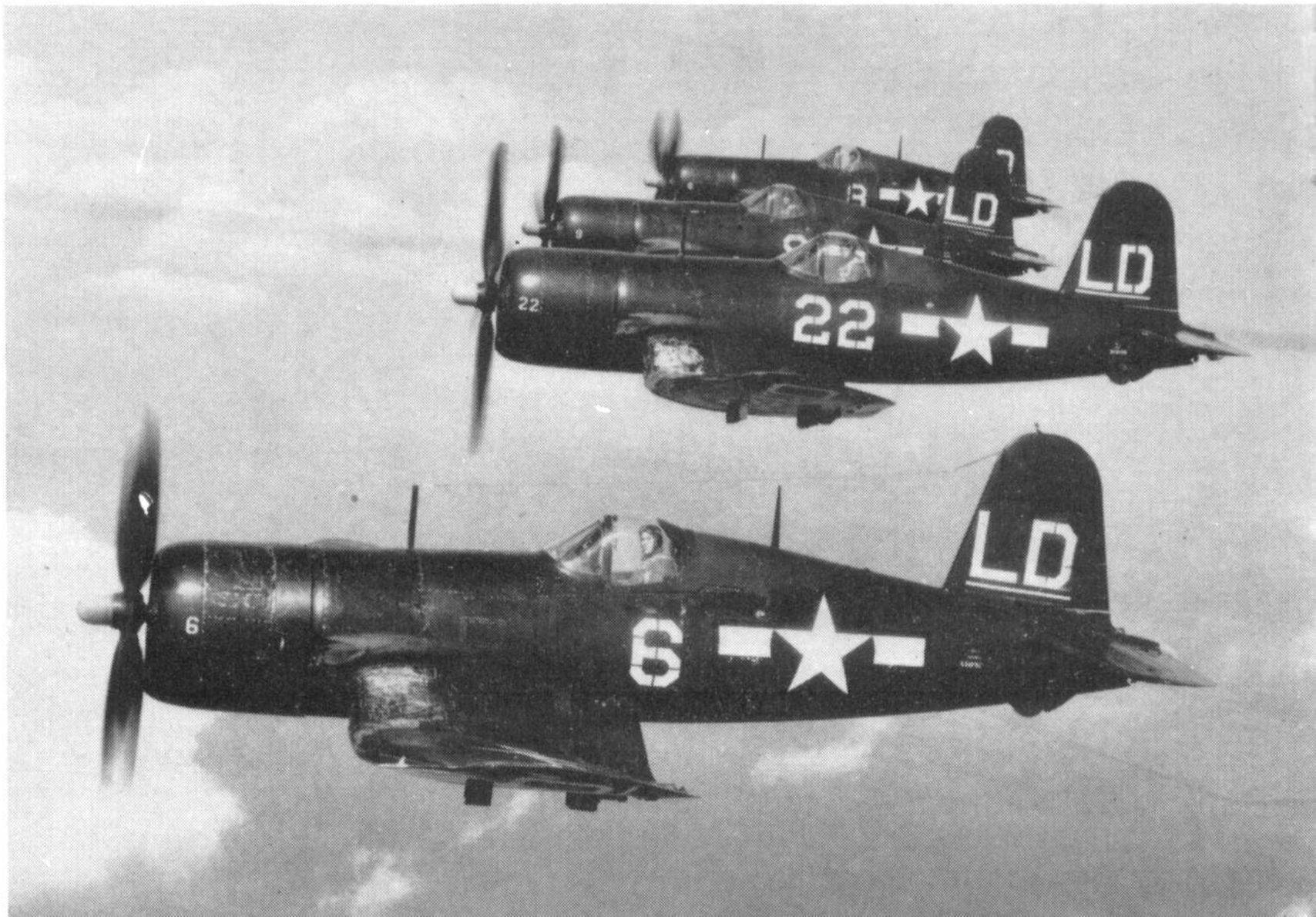
Pratt and Whitney had converted a standard F4U-1 into a testbed for flight tests of the 28 cylinder 3,000 horsepower R-4360 Wasp Major engine. While some quarters felt that the torque problems of such a large engine would be too severe for a fighter type, interest was generated in designs that evolved into the F2G.



Another view of F2G-1 BuNo 88454, showing exhaust details. (Photo: Goodyear)

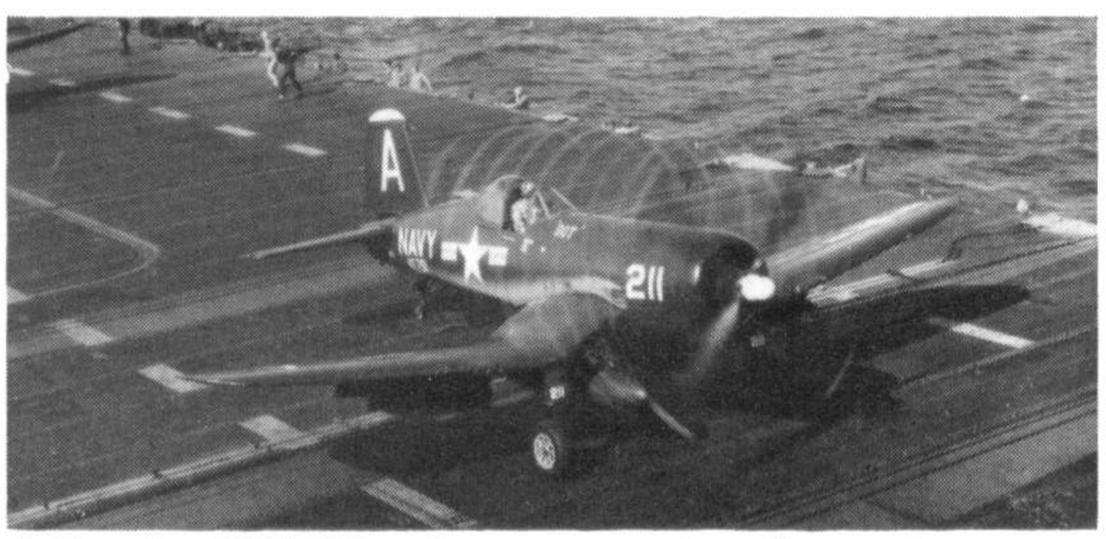
Marine Fighter Squadron VMF-214, operating from the carrier U.S.S. Sicily, *made combat sorties against Chinju and Simban-ni in Korea as early as 3rd August 1950. The F4U-4B's of Marine Air Group 33 were in action before the ground troops joined combat.* (Photo: via Naval Aviation News)

Goodyear modified two FG-1's (BuNo's unknown) as XF2G-1's. Production was ordered for 418 F2G's, but due to delays and development difficulties, production was cut back to a pilot production line only. The Corsair's rôle in the war had changed to that of a fighter-bomber, which did not require the high performance expected of the F2G. Thus the Goodyear FG-4 was placed into full production instead. A total of 15 production aircraft were delivered, five being F2G-1, BuNo's 88454-58. Although these were developed as "landbased" models they did have manually folding wings. Ten versions with full equipment for carrier operations were produced as F2G-2, BuNo's 88459–88468. These F2G-2's were fitted with a taller fin and rudder with a straight-section auxiliary rudder placed just



A formation of U.S.M.C. Corsairs on manoeuvres in August 1947. (Photo: U.S.M.C. via Naval Aviation News)

An F4U-4 of U.S. Navy Fighter Squadron VF 713 folds its wings to park on the flight deck of the carrier U.S.S. Antietam, *cruising in Korean waters in March 1952.*
(Photo: U.S.N. via Naval Aviation News)



A Corsair of VF-791 makes a vapour-ring effect as it starts up on the deck of the U.S.S. Boxer *off Korea in the summer of 1951.*
(Photo: U.S.N. via Naval Aviation News)

below the normal rudder. This, moving 12° 30′ to the right only, aided torque correction during carrier landings.

F4U-5

Apart from the F2G, the F4U-5 was the most radical redesign during the entire Corsair production life, and this was primarily an engine change. Two F4U-4's, BuNo's 97296 and 97415, were completed as F4U-5 prototypes, the first flying on 4th April 1946. Number 97296 crashed during flight tests and was replaced by BuNo 97364.

The Pratt and Whitney R-2800-32W Twin Wasp series "E" engines had twin auxiliary blowers instead of the single auxiliary blower of the previous versions. Being side mounted, these engine driven supercharger sections required the twin cheek inlets that identify the F4U-5 Corsairs. The fuselage ahead of the firewall was widened approximately eight inches to fair these inlets.

Typical scene aboard a U.S. Navy carrier during Korean War operations; an F4U-4B being re-armed for a ground strike on Communist positions from the U.S.S. Valley Forge. *The tail letter "S" identifies CVG-5, and the red tip indicates the third squadron in the Group.* (Photo: U.S.N. via Vought)

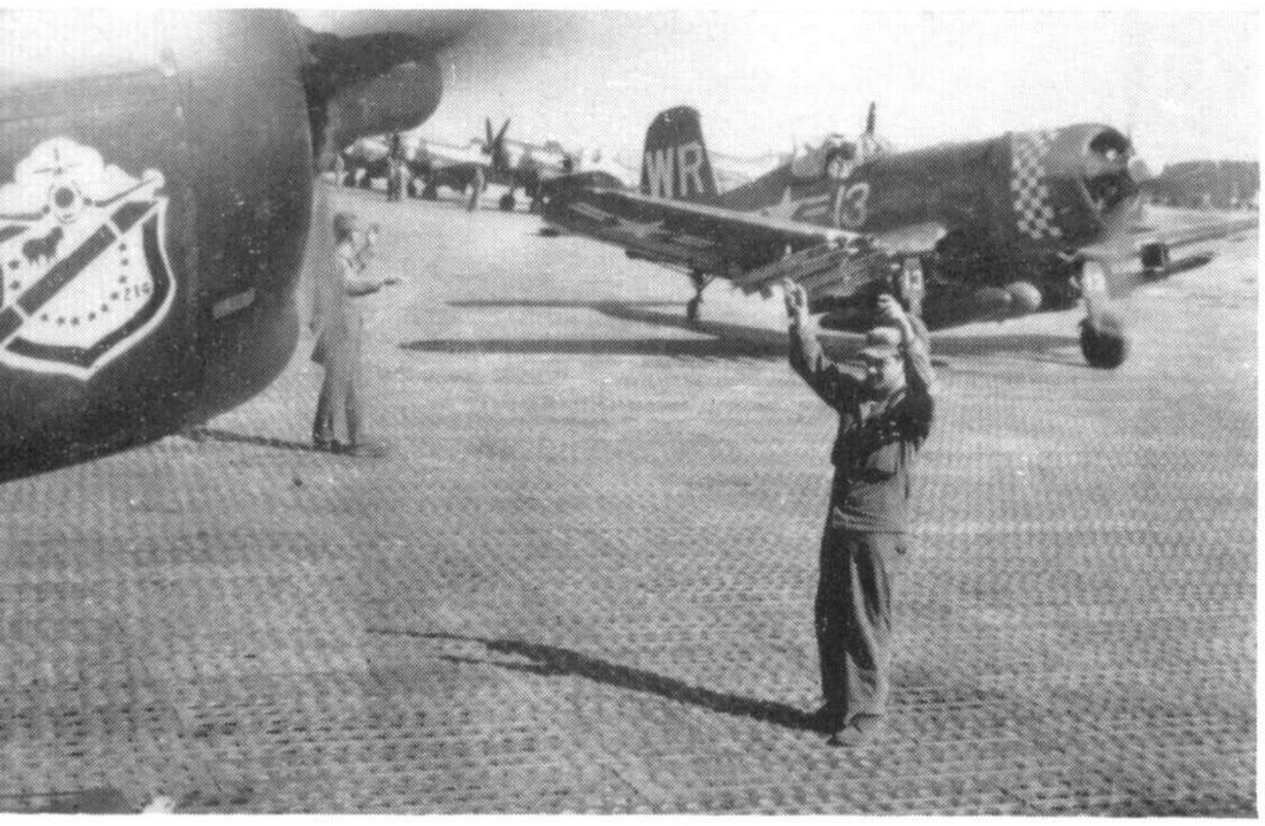
Having variable speed drive instead of the two-step gear ratios, the superchargers permitted up to an additional 150 horsepower below an altitude required for a supercharger ratio change. Also included was automatic engine control, whereby at a given throttle setting engine manifold pressures would be maintained throughout all aircraft manoeuvres by automatic adjustment of the carburettor throttle or variable ratio auxiliary supercharger stage. In operation, carburettor intake air was ducted from the cheek cowl inlets into the twin blowers, cooled by intercoolers in the wing root inlets before it was ducted into the mainstage blower in the engine crankcase. Cowl flaps, intercooler dump flap, and oil cooler doors were operated automatically. All had selective manual override switches as well.

Considering the flight date of 4th April 1946, it is strange to reflect that the F4U-5 was the first Corsair to have metal skin replacing the fabric that had covered the outer wing panels since the XF4U-1 flew on 29th May 1940.

The engine was given 2° 45′ downthrust; this improved stability and aided visibility over the widened nose and cowling. To improve rearward visibility, the line of the canopy sliding section was raised at the trailing edge and the sides were bulged outwards.

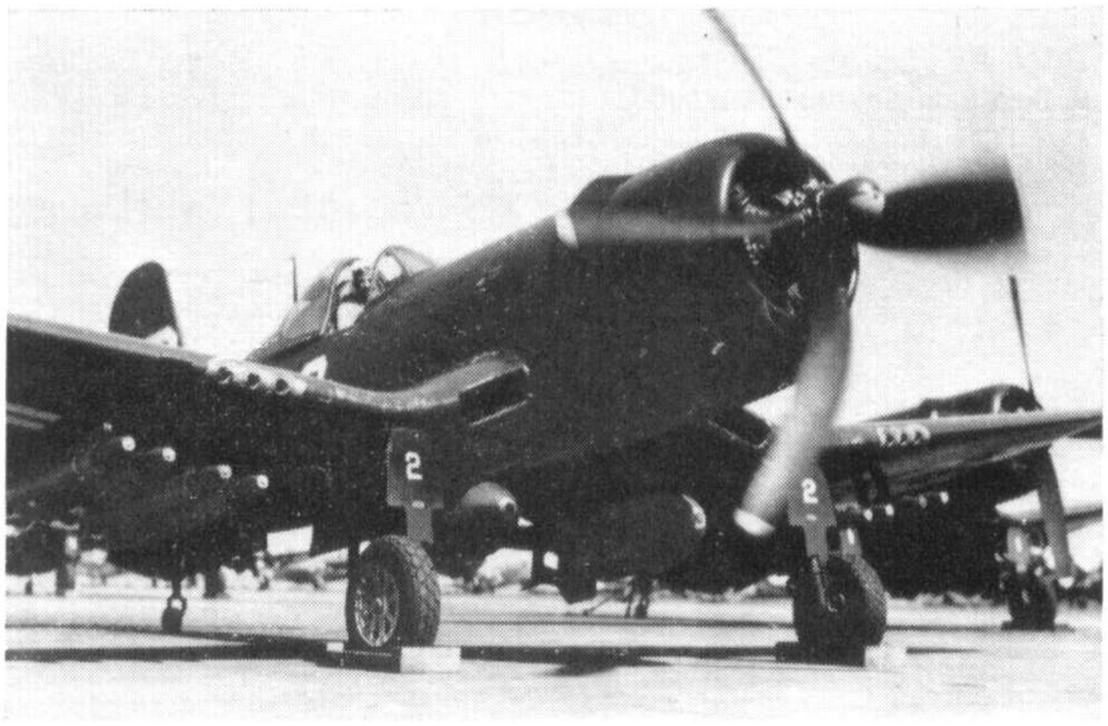
Basic armament of the F4U-5 series was four M3 (T-31) 20 mm. cannon, placed two in each outer panel. The Mk. 6 Fire Control System incorporated the Mk. 8 Gyroscopic Lead Computing Reflector Gunsight. Twin centre section stations and an added fuselage centreline position were utilized for auxiliary fuel tanks to be carried, or bombs up to 1,600 lb. on each pylon and 2,000 lb. on the centreline rack. In common with this and all subsequent versions, the three centre section positions could carry fuel tanks

F4U-4's line up for take-off from the U.S.S. Boxer, *while a helicopter hovers nearby in case of take-off accidents. White tail tips and airscrew hubs indicate the second squadron in the Group, in this case probably VF-22.*
(Photo: U.S.N. via Vought)

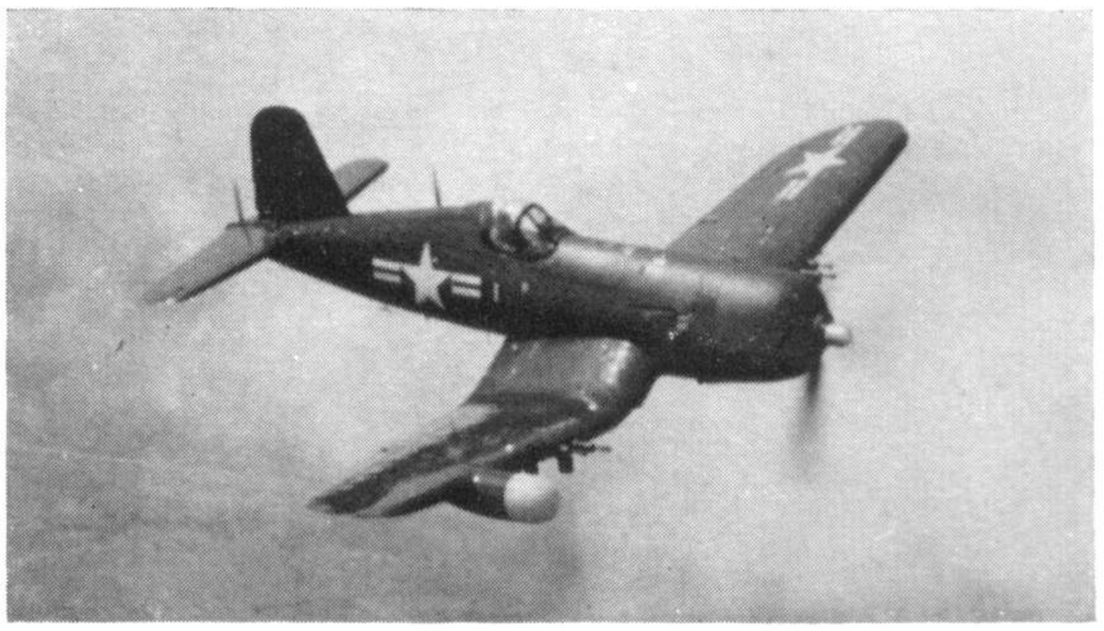


A "Checkerboard" F4U-4B of VMF 312 on a steel mat airstrip in Korea; note badge of VMF 214 "Blacksheep" on cowling of aircraft in foreground. (Photo: U.S. M.C.)

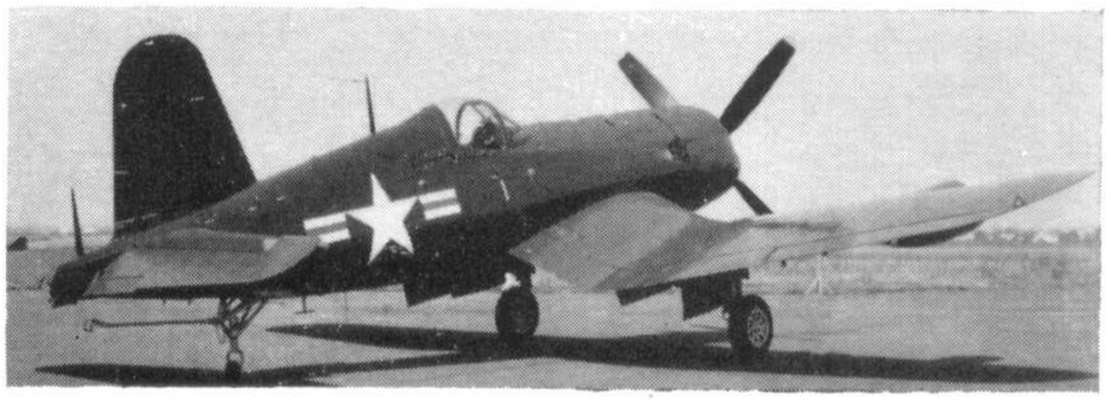
Cannon-armed F4U-4B's of VMF 214 on board the U.S.S. Sicily.



Early rounded windshield on a Korea-based F4U-4.



In-flight study of an F4U-5NL, and (below) close-up of an F4U-5N. (Photos: United Aircraft Corp.)



on both pylons or on the centreline and right hand pylon. Due to limitations of the fuel selector system, tanks could not be utilized on centreline and left hand pylon simultaneously. Either Mk. 5 or Mk. 12 external drop tanks could be mounted; both types held 150 gallons.

Launchers for 10 rockets were now fitted on wing outer panels. While salvo firing was still prohibited, the fire control allowed high rate "ripple firing" of rockets.

The last F4U-5, an F4U-5N, was delivered on 22nd October 1951. Included in the -5 series were 30 F4U-5P photo aircraft and 101 winterized F4U-5NL nightfighters for use in Korea.

AU-1

Converted from the 509th F4U-5NL, the F4U-6/AU-1 prototype flew on 31st January 1952. The AU-1, designed as the F4U-6 and redesignated, was intended for the close support rôle. Mounting a low altitude version of the Twin Wasp, the R-2800-83W utilizing only the crankcase blower as a two speed single stage supercharger, the AU-1 was heavily armoured for ground attack. There were 25 pieces of armour plate, 17 of which protected the underside of the engine and accessory section. Two more pieces protected the underside of the fuel tanks, also covered by the heavy magnesium plate ahead of the windscreen. In addition, the pilot was shielded by two floor and two lower side panels, the two-piece rear armour plate and the clear flat bulletproof windscreen panel.

The oil coolers are a prime example of the well-conceived protection. Instead of facing forward in the wing inlets as in all other versions, the oil coolers were placed in the wing roots, facing inboard so that they would have frontal protection, as well as from below.

Engines used in the AU-1's were R-2800-83's that had been licence-built for the Air Force by Chevrolet. Purchased as surplus by Capital Airlines and converted to -83A's by an ignition change, the Navy

F4U-7 in markings of Aéronavale Flotille *14F folding wings after deck landing; Corsairs of this unit operated from the French carrier* Arromanches *in the Mediterranean during the Suez fighting of 1956.*

Note widened cowling for cheek inlets of this F4U-5, also fairing aft of canopy permitting higher seat positions. The canopy bulged beyond the edges of the sliding frame to improve rearward vision.

purchased them for the Corsair. After overhaul and the addition of water injection, they were redesignated -83WA.

Gun armament consisted of four M3 (T-31) air-cooled 20 mm. cannon, specially modified for the AU-1 and firing 720 rounds per minute. Each carried 215 rounds and could be selectively fired in left and right pairs or simultaneously. Aimed with the Mk. 6 Mod. O Fire Control System, the gyro gunsight had either 20 mm. gun or rocket settings and dive angle compensation settings for dives over 35° or 35° and under. Wing outer panels were stressed to carry ten 100 lb. 5 inch rockets or ten 100 lb. or six 500 lb. bombs in addition to the centre section load. Six 500 lb. bombs were considered as three "External Units".

A total production of 110 aircraft were delivered from 7th February 1952 to 10th October 1952.

F4U-7

Coming off the Dallas production line along with the AU-1, the F4U-7 was specifically designed for French use in Indo China. Supplied with Military Defence Assistance Program funds, the type was basically an F4U-4 in an AU airframe. Using the same R-2800-43W engine as the later F4U-4's, the F4U-7 first flew on 2nd July 1952.

On 31st January 1953, the last of 12,571 Corsairs, the 94th F4U-7, BuNo 133832, came off the line. Now there is a new Corsair, the LTV Vought A-7A Corsair II. As this *Profile* is being written, the first squadron deliveries are underway; whether it can live up to its legendary namesake will soon be seen. Even though the A-7 can carry a weapons load as great as the take-off weight of many F4U's, it still has a large pair of shoes to fill.

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The F4U-5N with radar "bucket" on starboard wing leading edge.

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KOREAN WAR CORSAIR SQUADRONS

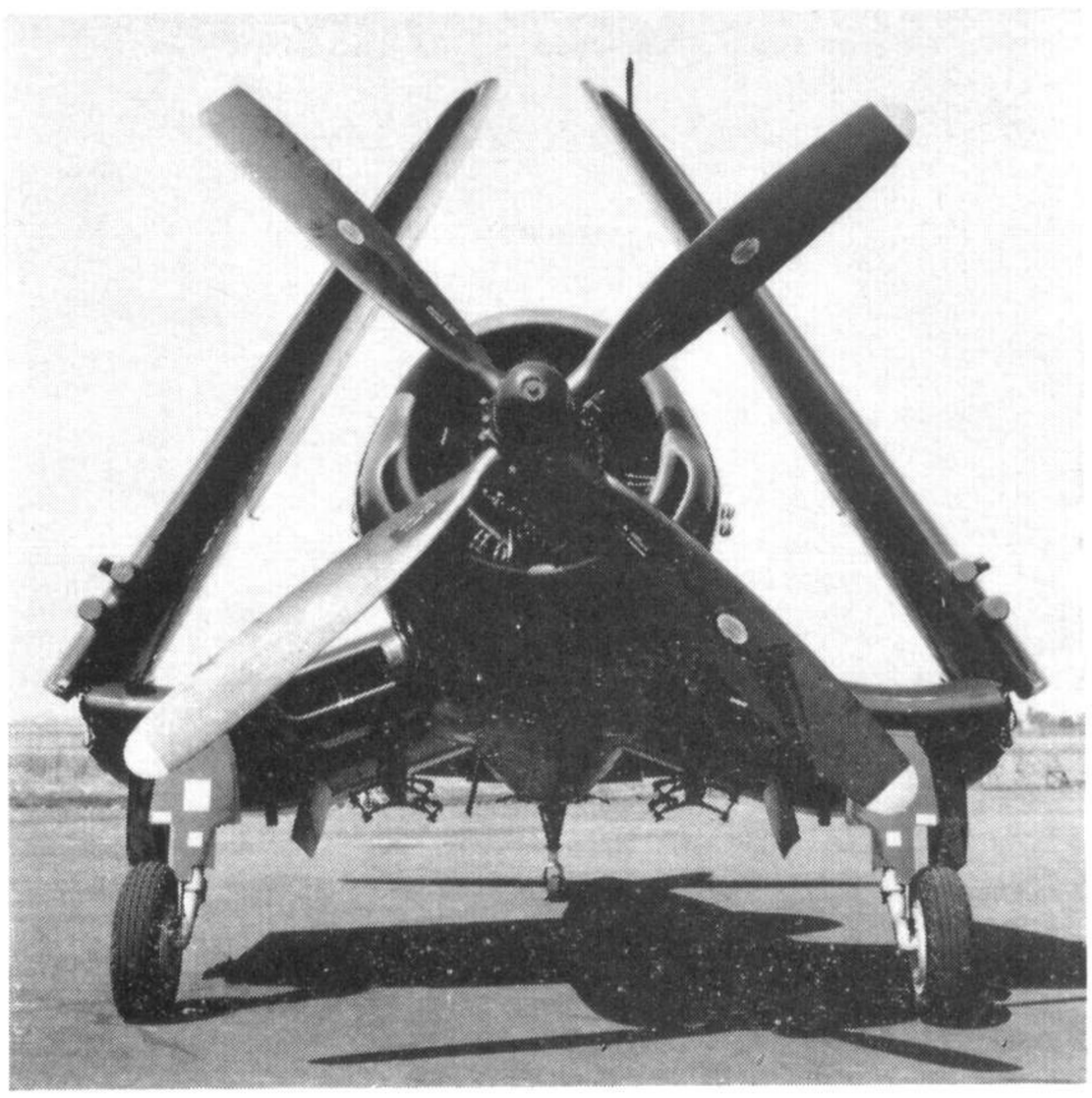
Marine Corps Squadrons and Tail Letters

LD —VMF-212.*
WE —VMF-214 "BLACKSHEEP".
WR —VMF-312 "CHECKERBOARD".*
MS —VMF-323.*
WS —VMF(N)-513 "FLYING NIGHTMARES".
MR —VMA-332 "POLKADOTS".
MW —VMJ-3 (Marine Utility Squadron).
** Later VMA- Attack Squadrons.*

U.S.N. SQUADRONS

Squadron	Carrier Air Group	Identification letter
VF 21	CVG–2	M
VF 22	CVG–2	M
VF 24	CVG–2	M
VF 33	CVG–3	K
VF 34	CVG–3 (Oct. 1950—Jan. 1951)	K
VF 34	CVG–19 (June 1951—Aug. 1951)	B
VF 44	CVG–4	F
VF 53	CVG–5	S
VF 54	CVG–5	S
VF 63	CVG–2	M
VF 64	CVG–2	M
VF 74	CVG–7	L
VF 92	CVG–5	S
VF 94	CVG–9	N
VF 113	CVG–11	V
VF 114	CVG–11	V
VF 152	CVG–15	H
VF 192	CVG–19	B

The cheek inlets are clearly shown in this head-on view of an F4U-5P; the "stub" below each outboard cannon position is a permanent bomb or rocket rack point.



Attractive study of a partially-painted AU-1; only wing outer panels and tail control surfaces are finished in glossy sea blue.

Squadron	Carrier Air Group	Identification letter
VF 193	CVG–19	B
VF 653	ATG–1	U
VF 713	CVG–15	H
VF 783	CVG–102	D
VF 791	CVG–101	A
VF 821	CVG–19	B
VF 871	CVG–19 (June 1951—Aug. 1951)	B
VF 871	ATG–2 (July 1952—Jan. 1953)	W
VF 874	CVG–102	D
VF 884	CVG–101	A
VC 3 (Composite Sqdn. 3)	—	NP

Carrier	Carrier Air Groups and detached squadrons
Valley Forge (CVA–45)	CVG–5, CVG–2 and ATG–1
Philippine Sea (CVA–47)	CVG–11, CVG–2 and CVG–11
Sicily (CVE–118)	VMF–214, VMF–323 and VMA–312
Badoeng Strait (CVE–116)	VMF–323, VMF–212 and VS–931
Boxer (CVA–21)	CVG–2, CVG–101 and CVG–2
Leyte (CVA–32)	CVG–3
Princeton (CVA–37)	CVG–19
Bataan (CVL–29)	VMF–212
Bon Homme Richard (CVA–31)	CVG–102 and CVG–7
Rendova (CVE–114)	VMF–212
Essex (CVA–9)	CVG–5 and ATG–2
Antietam (CVA–36)	CVG–15
Bairoko (CVE–114)	VMA–312

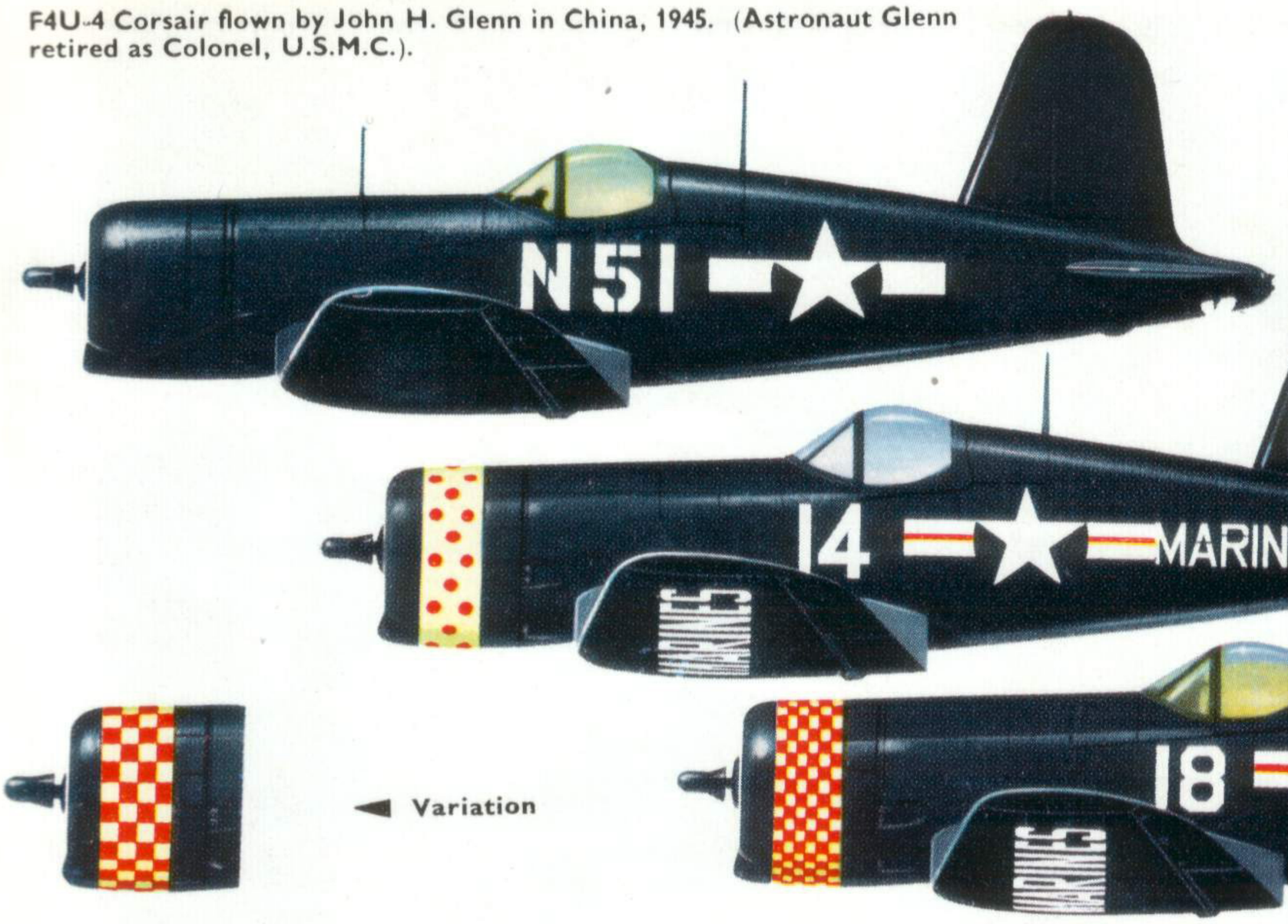
PRINCIPAL DIMENSIONS

Span	40 ft. 11¾ in.
Span, Folded	17 ft. ½ in.
Length (F4U-4)	33 ft. 8¼ in.
Length (F4U-5 and subsequent)	34 ft. 6·15 in.
Height, over Prop.	14 ft. 9 in.
Height, Wings Folded	16 ft. 4 in.

Wing	
Chord Root	105 in.
Chord at Tip	71·38 in.
Incidence at Root	2°
Sweep Leading Edge	4° 10′
Dihedral, Outer Panel	8° 30′
Stabilizer	
Span	16 ft. 6 in.
Max. Chord	33·84 in.
Incidence (positive)	1¼°
Dihedral	0°
Areas	
Wing, less Ailerons	258·2 sq. ft.
Ailerons	18·1 sq. ft.
Flaps Total	36·4 sq. ft.
Stabilizers	28·6 sq. ft.
Elevators, aft of Hinge (including Tabs)	21·9 sq. ft.
Elevators, ahead of Hinge	2·7 sq. ft.
Trim Tabs	1·36 sq. ft.
Balance Tabs	0·74 sq. ft.
Fin (Total)	7·34 sq. ft.
Rudder, aft of Hinge (including Tabs)	13·0 sq. ft.
Rudder forward of Hinge	1·66 sq. ft.
Trim Tabs	0·85 sq. ft.
Control Movements	
Ailerons	19 up, 14 down
Elevators	23½ up, 17 down
Rudder	25 right, 25 left
Trim Tabs	
Elevator	10 up, 20 down
Rudder	18 right, 18 left
Aileron	15 up, 15 down
Tolerance of Control Movements	1 plus or minus

F4U-7 for the French Navy and AU-1 for the U.S. Marines photographed at Vought's Dallas, Texas, plant.

F4U-4 Corsair flown by John H. Glenn in China, 1945. (Astronaut Glenn retired as Colonel, U.S.M.C.).



F4U-4 Corsair of U.S. Marine squadron VMA-332 "Polkadots"; Korea, 1951.

◄ Variation

F4U-4 Corsair of U.S. Marine squadron VMA-312 "Checkerboard"; Korea, 1951.

F4U-4 Corsair of U.S. Marine squadron VMF-211, Portex Manoeuvres, 1949.

AU-1 Corsair, U.S.M.C. Quantico, Virginia.

Aéronavale, French Naval Aviation.

F4U-7 Corsair, *Aéronavale Flotille* 14F; French aircraft carrier "*Arromanches*", Suez operations, 1956.

Flotille 14F.

Argentine Navy, early wing insignia,

F4U-5NL Corsair, Argentine Navy; early scheme.

Argentine Navy, early fuselage insignia.

Argentine Navy, current insignia. Note centre is ground colour of aircraft.

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F4U-5 Corsair, Argentine Navy.

Interesting view of an F4U-5NL of the 2nd Attack Squadron, Argentine Aviación Naval *from the carrier* A.R.A. Independencia.
(Photo: via Naval Aviation News)

F4U-5N with wings folded; the small "bucket" on the starboard leading edge close to the fold line protects the gun camera from muzzle flashes during night combat.
(Photo: United Aircraft Corp.)

F4U-5—Engine Data

R-2800-32W

Combat (Water Injection) (5 minutes) ...	2,760 h.p. at 2,800 r.p.m.
Military Power (30 minutes)	2,300 h.p. at 2,800 r.p.m.
Normal	1,900 h.p. at 2,600 r.p.m.

Production Figures, F4U-4 to F4U-7, by Years

	F4U-4*	F4U-5	-5P	-5N	-5NL	AU-1	F4U-7
1944	8	—	—	—	—	—	—
1945	1970	—	—	—	—	—	—
1946	246	—	—	—	—	—	—
1947	132	68	1	5	—	—	—
1948	—	155	29	69	—	—	—
1949	—	—	—	61	—	—	—
1950	—	—	—	65	42	—	—
1951	—	—	—	14	58	—	—
1952	—	—	—	—	—	111	79
1953	—	—	—	—	—	—	15

* *Includes F4U-4E, -4N and -4P.*

Production Figures by Types

F4U-4XA	1	XF4U-5	3 (5)
F4U-4XB	1	F4U-5	223
XF4U-4	5	F4U-5N	214
F4U-4	2,197 (1)	F4U-5NL	100 (6)
F4U-4B	139 (2)	F4U-5P	30
F4U-4E	— (3)	XF4U-6	1 (7)
F4U-4N	— (3)	AU-1	111
F4U-4P	11 (4)	F4U-7	94

Notes:

(1) *Includes F4U-4E and -4N.*
(2) *Vought source. Navy source lists 287; may include -4E and -N.*
(3) *Quantities and BuNo's unknown.*
(4) *BuNo's unknown.*
(5) *Two from F4U-4, one crashed and replaced by F4U-4B.*
(6) *Plus one to XF4U-6.*
(7) *Redesignated AU-1.*

PERFORMANCE

	F4U-4	F4U-5
Weights		
Combat Clean	12,465 lb.	12,356 lb.
Take-off, Normal Fighter	13,555 lb.	12,901 lb.
Max. Take-off	19,500 lb.	19,697 lb.
Max. Ceiling	41,500 ft.	43,500 ft.
Max. Speed, Sea Level	373 m.p.h.	347 knots
Max. Speed, Critical Alt.	450 m.p.h.	408 knots
Stall Speed, Clean Take-off	90·4 m.p.h.	79·8 knots
Max. Range, Clean, 234 gallons	1,120 miles at 170 m.p.h.	850 miles at 156 knots

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